

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 1200 6<sup>TH</sup> AVENUE SEATTLE, WASHINGTON 98101

**DATE:** See date of Section Chief signature

**SUBJECT:** CLEAN AIR ACT INSPECTION REPORT

McCall Companies, Portland, Oregon

**FROM:** Daniel Heins, Environmental Scientist

Air Toxics Enforcement Section, EPA Region 10

**THRU:** Derrick Terada, Acting Section Chief

Air Toxics Enforcement Section, EPA Region 10

**TO:** File

## **BASIC INFORMATION**

Facility Name: McCall Companies

Facility Location: 5480 NW Front Avenue, Portland, OR 97210

**Date of Inspection:** June 21, 2022

#### **EPA Inspector(s):**

1. Daniel Heins, Environmental Scientist

#### **Other Attendees:**

- 1. Steve Kenyon, Operator McCall Companies
- 2. Dustin Wilson,\* Director of Terminal Operations McCall Companies
- 3. George Yun, Air Quality Inspector Oregon Department of Environmental Quality (DEO)
- 4. Chris Moore, Air Quality Inspector DEQ

Contact Email Address: Dustin@McCallTerminals.com

**Purpose of Inspection:** Tanks inspection

Facility Type: Bulk fuels and asphalt terminal

<sup>\*</sup> Daniel Heins called Dustin Wilson via cell phone during the opening conference, and he arrived on site during the site tour.

**Arrival Time:** 15:45 **Departure Time:** 17:30

**Inspection Type:** Unannounced Inspection

#### **OPENING CONFERENCE**

- ⊠ Stated authority and purpose of inspection
- Provided Small Business Resource Information Sheet (via email after inspection)

The following information was obtained verbally from McCall Companies ("McCall") representatives unless otherwise noted.

#### **Process Description:**

McCall operates a bulk fuels and asphalt terminal in Portland ("The Facility"). The Facility receives, stores, and distributes biodiesel, diesel, and asphalt products. The Facility does not currently handle heating oil or tug fuel. The Facility receives asphalt by ship and rail, and distributes asphalt by truck. The Facility receives diesel and biodiesel by truck and ship, and could receive by rail. The Facility distributes diesel and biodiesel by truck and barge. The Facility's dock is occasionally used to receive renewable diesel (and no other products) for Zenith. The Facility has the capability of doing the same for Phillips 66 but does not in practice.

The Facility's largest tanks are on the northeastern portion of the site. Here the Facility has three large asphalt storage tanks with maximum capacities of 9 to 12 million gallons, typically heated to around 240 degrees Fahrenheit. There are also large tanks of diesel and biodiesel on this side of the Facility.

By near the truck loading is a tank farm with smaller tanks of asphalt and asphalt additives, which are blended for loading. The three largest tanks here have approximately 406 thousand gallon capacities and store asphalt products heated to approximately 350 degrees Fahrenheit. All other tanks in this area have capacities below 100 thousand gallons.

The Facility has vapor recovery/control for loading asphalt and diesel. The tanks are all directly venting, though some of the diesel and biodiesel tanks have internal floating roofs.

## **TOUR INFORMATION**

**EPA Tour of the Facility:** Yes

#### **Data Collected and Observations:**

Daniel Heins used a Thermofisher TVA2020 flame ionization device ("the TVA") to measure the total hydrocarbon concentration in parts per million as methane (ppm) from sample ports at the tops of heated asphalt tanks. See Appendix A for a Facility map with selected tanks labeled.

Daniel Heins took readings at the tops of Tank 4 and 1 (the two largest asphalt tanks, both heated to approximately 245 degrees Fahrenheit and containing 58-28 and 64-22 grade asphalt, respectively). Tank 2 was empty during the inspection to facilitate maintenance. Daniel Heins then took readings at tanks 20 and 19 (heated to 327 and 346 degrees Fahrenheit and containing pitch and 58-28 asphalt, respectively). Tanks 19, 20, and 21 are the largest tanks in the loading area of the Facility. Tank 21 contained 62-22 asphalt and was not monitored. The pitch tank is the only one at the Facility. Steve Kenyon accompanied Daniel Heins up the tanks and observed the readings.

Photos and/or Videos: were not taken during the inspection.

**Field Measurements:** were taken during this inspection. See Appendix B.

## **CLOSING CONFERENCE**

Provided U.S. EPA point of contact to the facility

Daniel Heins informed the Facility that research and investigations over the past decade had identified that default AP-42 emission factors/vapor pressures for heated asphalt underestimate actual volatile organic compound (VOC) emissions, and that many facilities with heated asphalt tanks are likely underestimating their emissions. Daniel Heins referenced a <a href="November 2020 EPA">November 2020 EPA</a> Enforcement Alert regarding this. McCall stated they would have to defer to the engineers that calculate the annual emissions estimates.

#### **Requested documents:**

EPA requested the following during the closing conference and confirmed via email:

- Site map with tank IDs
- Emissions calculations workbook for most recent submitted annual report
- List of tanks on site with:
  - o Size/capacity
  - o Product
  - o Emissions controls (if applicable)
  - o Typical heating temperature (if applicable)
  - o Product max true vapor pressures

# **DIGITAL SIGNATURES**

Daniel Heins, R	eport Author	
Derrick Terada	Acting Section Chief	

## **APPENDICES AND ATTACHMENTS**

Appendix A: Site Map

Appendix B: Field Measurement Data

# **APPENDIX A: SITE MAP**



Above is a partial map of the Facility. Approximate Facility bounds highlighted in blue. Selected tanks labeled, with typical contents listed below:

Tanks 1, 2, & 4: heated asphalt, at approximately 240 deg F (#2 empty at time of inspection)

Tanks 19, 20, & 21: heated asphalt, at approximately 350 deg F

Tanks 7 & 8: diesel

Tanks 9 & 10: biodiesel

## **APPENDIX B: FIELD MEASUREMENT DATA**

Tank #	Product	TVA PPM	<b>Heating Temperature (deg F)</b>
4	64-22 Asphalt	246	242
1	58-28 Asphalt	170	245
20	Pitch	12,000	327
19	58-28 Asphalt	1,600	346

TVA instrument readings are given in parts per million (ppm) total hydrocarbon, as methane, and were taken at sample ports on the tank roofs opened by McCall to facilitate the readings.

## **Calibration and Instrument Information**

Daniel Heins used a ThermoFisher Toxic Vapor Analyzer 2020 (TVA2020), designated as TVA A95732. The EPA TVA2020 response time is approximately 4.5 seconds.

	Calibration gas ppm	A95732 ppm
08:30 calibration check	500	497
08:30 calibration check	10000	1.03%
18:15 drift check	500	471
18:15 drift check	10000	9802

EPA calibration gases

Composition	Lot#	Expiration
Air zero grade THC <1 ppm	DBJ-1-24	March 2023
Methane in air 500 ppm	1-167-64	June 2024
Methane in air 10,000 ppm	228894	February 2023